



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,010	07/10/2001	Lee A. Walker	3540-US	7649
56436	7590	01/30/2007	EXAMINER	
3COM CORPORATION			HOSSAIN, TANIM M	
350 CAMPUS DRIVE			ART UNIT	PAPER NUMBER
MARLBOROUGH, MA 01752-3064			2145	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/30/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/901,010	WALKER ET AL.
	Examiner	Art Unit
	Tanim Hossain	2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 09 November 2006.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,12,13,15,19,20 and 24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1, 12, 13, 15, 19, 20, and 24 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 12, 13, 19, 20, and 24 are rejected by Gardner (U.S. 2003/0198247) in view of Crayford (U.S. 5,610,903).

As per claim 1, Gardner teaches a method of checking configurations on a network including performing automated remote monitoring of each of a plurality of managed devices in the network, the remote monitoring comprising: for each port of a plurality of ports of each of said plurality of managed devices on the network, discovering configuration information for each port and its respective associated link to a respective other device, said configuration information for said port and said respective other device a respective duplex state and data transmission speed (paragraph 0015, 0021; where the auto-negotiation process indicates the duplex state of the ports; and where the operation at different speeds is disclosed, so the data transmission speed is indicated); applying a series of interrogations to the configuration information to determine whether said each port and associated link conform to at least one predetermined configuration criterion for each of said duplex state and data transmission speed (0010, 0016, 0021; where the process of auto-negotiation employs queries and tests to decipher in which mode the link is

operating); and when the configuration of said each port and associated link does not conform to said at least one predetermined configuration criterion, providing an indication of the non conformity that has been determined (0010, 0016; where the lack of success in auto-negotiation is indicated by various signs). Gardner does not specifically teach the per se accessing of configuration information, but rather teaches the discovery of the configuration information through the auto-negotiation process. Crayford teaches the accessing of port configuration information (Abstract; column 5, lines 15-36). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to actively access configuration information, as taught by Crayford in the system of Gardner. The motivation for doing so lies in the fact that actively accessing configuration information would better enable the process of negotiating links. Both inventions are from the same field of endeavor, namely the automatic negotiation of links.

As per claim 12, Gardner-Crayford further teaches a method in which the interrogations determine whether said each port and a port at the other end of said associated link are running the same duplex mode (Gardner: 0010, 0016).

As per claim 13, Gardner-Crayford further teaches a method in which the interrogations determine whether ports at both ends of said associated link are capable of full duplex operation (Gardner: 0010, 0016).

As per claim 19, Gardner-Crayford further teaches a method in which the interrogations determine whether auto-negotiation is switched on at both ends of the link (Gardner: 0010, 0016; Crayford: Abstract, column 5, lines 15-36).

As per claim 20, Gardner-Crayford further teaches a method in which the interrogations determine whether each said port has been set to run at a fixed speed less than its maximum capability with auto-negotiation (Gardner: 0010, 0016; Crayford: Abstract, column 5, lines 15-36).

Claim 24 is rejected under Gardner-Crayford on the same basis as claim 1, as claim 24 discloses a media implementation of claim 1.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner-Crayford in view of Malalur (U.S. 6,879,588).

As per claim 15, Gardner-Crayford teaches a method as in claim 1 in which said respective other device is a managed device and said series of interrogations determine link characteristics, and whether these links are enabled (Gardner: 0010, 0016; Crayford: Abstract, column 5, lines 15-36). Gardner-Crayford does not specifically teach the determination of trunk links and whether they are enabled. Malalur teaches the automatic detection and enabling of trunk links (column 25, lines 51-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to detect, through queries, the existence of trunk links and whether they are enabled, as taught by Malalur in the system of Gardner-Crayford. The motivation for doing so lies in the fact that having a trunk link detection system would add another functionality to Gardner-Crayford's system, allowing for further versatility. All inventions are from the same field of endeavor, namely the efficient configuration of network components.

***Response to Arguments***

Applicant's arguments filed on November 9, 2006 have fully been considered, but are not persuasive.

- a. Applicant asserts that there is no teaching in Gardner that "a port can know anything about any other port that the port is connected to over a link." This assertion is disregarded because it is not claimed, and is therefore not relevant to the arguments of claim 1.
- b. Applicant asserts that Gardner has nothing to do with remote monitoring. Examiner respectfully disagrees. Paragraph 0015 of Gardner discusses a port monitoring state machine. This constitutes remote monitoring. Further, the system of Gardner is monitored for collisions and other non-conformities between ports, which fully constitutes the concept of remote monitoring as claimed.
- c. Applicant further asserts that Gardner is drawn solely monitoring one port for one device. Examiner again respectfully disagrees. Paragraph 0013 discusses a plurality of port interfaces. It also teaches that the disclosure is presented on a per-port basis, which is indicative of a system with multiple ports and devices. Further, Crayford discusses the monitoring of multiple stations for network capabilities. All functions taught in Gardner-Crayford apply to the plurality of components and devices in the system, but are illustrated as a per-port/per-device basis (Gardner: 0013; Crayford: Abstract). Therefore, Gardner-Crayford fully teaches "each port of a plurality of ports of each of said plurality of managed devices on the network."
- d. Applicant asserts that Crayford does not teach the accessing of configuration information. Examiner respectfully disagrees. In the Abstract and column 5, lines 15-36,

Crayford discusses the monitoring of the stations, monitoring test patterns, and indicating duplex capabilities. When the system determines that a certain station has a certain duplex capability and is operating at a certain capability, this constitutes the accessing of configuration information. The station is configured to function in a certain duplex mode, and information regarding this mode is obtained by the system. Therefore, this constitutes accessing configuration information.

e. Regarding claim 12, Applicant contends that “the ports described in Gardner and Crayford can never perform the interrogations of each port of a plurality of ports of each of said plurality of managed devices on the network.” This statement differs from the claim language, and is therefore not relevant to the discussion of claim 12. Further, Gardner-Crayford repeatedly discusses the determination of whether the ports in communication with one another are running the same duplex mode. Please see paragraphs 0017-0019 in Gardner. Gardner teaches running tests and hypotheses so as to discover configuration non-conformities. Errors in tests are indicative of non-conformities, such as if one port is running at full duplex and another is running at half duplex, for example. As such, claim 12 is fully taught by Gardner-Crayford.

f. Regarding claim 15, Gardner-Crayford teaches that other devices are managed devices, that the interrogations determine link characteristics, and whether the ports in the links are enabled. Malalur is relied upon to teach the concept of the determination of whether a link is a trunk link. Column 25, lines 51-67 discloses the recognition and determination of a trunk link, and combining this ability to determine into the teaching of Gardner-Crayford arrives at the claimed invention. Motivation to combine teachings lies in the fact that the inclusion of the ability to determine a trunk link would allow for further efficiency of the invention, such that the

system would be able to recognize a trunk link, and accordingly, perform optimally in relation to the requirements of this particular link type. All inventions are also from the same field of endeavor, namely the network monitoring and optimization of links.

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571/272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tanim Hossain  
Patent Examiner  
Art Unit 2145



JASON CARDONE  
SUPERVISORY PATENT EXAMINER